# **Mitigation Measures**

# 1. Mitigation of Impacts of Even-Aged Timber Harvests on Scenic Vistas

Mitigation 1. For even-aged timber harvest plans, conduct field evaluations by a RPF or his or her designee to determine the visibility of the THP area to the Forest visitor as seen from roads, trails, and recreation areas. Evaluations will be given to, but not limited to: the degree and duration of vistas, and general topography of the THP area in relation to the view aspect, and type and density of forest canopy and understory cover of forest areas surrounding the THP area. Where appropriate to visually soften and mitigate impacts created by even-aged management on the integrity of scenic views visible to the general forest visitor, amend the THP to include one or a combination of the following: modify the configuration of the harvest area to better reflect topography; modify the configuration of the harvest area to avoid spanning ridgelines in whole or in part; or leave selected standing trees along the harvest edge boundaries. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Even-aged management THPs

Implementation: the Department Responsibility: the Department

## 2. Mitigation of Visual Impacts of Timber Harvests Activities

Mitigation 2. For all timber harvest plans conducted within or adjacent to Special Treatment Areas or buffer areas that are identified but not specifically defined in the DFMP, conduct field evaluations by a qualified professional as determined by CDF, to determine the visibility of the THP area. Evaluations will be given to, but not limited to: the degree and duration of views from areas of concern; presence of distinctive visual attributes such as rock outcrops, streams, or distinctive flora; type and density of forest canopy and understory cover; and general topography in relation to the view aspect. Evaluations should take into account the configuration of the THP in relation to the areas around it. Where appropriate to visually screen views from Special Concern Areas and the Mendocino Woodlands State Park and Outdoor Center, or to direct views to provide desirable vistas, modify the width of the buffer appropriately (wider or narrower). Designate timber harvest practices within buffer areas to be one or a combination of singletree selection, hazard tree removal, or no harvesting as appropriate. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan Scope: THPs within or adjacent to Special Concern Areas

Implementation: the Department the Department the Department



#### 3. Mitigation of Impacts from Light and Glare

Mitigation 3. Amend the DFMP to require the Forest Learning Center to be located and designed in accordance with the CEQA process to not significantly affect day or nighttime views from campgrounds or residential areas. Monitoring of this mitigation measure shall be as follows:

Timing: During adoption of FMP and selection of facility site

Scope: Highway 20 corridor Implementation Responsibility: the Department Monitoring Responsibility: the Department

### 4. Mitigation of Impacts On Aquatic Resources

Mitigation 4A. Either programmatic or THP-specific instream LWD surveys are recommended to help determine appropriate retention standards prior to designing WLPZ prescriptions. If instream wood loads do not meet target criteria as described in Bilby and Ward (1989), Class I WLPZ silviculture will either be no-cut (except for harvest of cable corridor trees where needed) within 100 to 150 feet of the Watercourse Transition Line, or limited to "thinning from below," to promote growth on the larger diameter trees and improve LWD recruitment potential. WLPZ prescriptions shall default to either no-cut within 100 to 150 feet of the Watercourse Transition Line or limited to "thinning from below" silviculture if the recommended LWD surveys are not conducted. Monitoring of this mitigation measure shall be as follows:

Timing: As part of THP review

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department

Mitigation 4B. As part of a focused study project, assess for the potential of placing large wood into the Class I channel. Where assessments indicate that LWD levels are low and instream placement is feasible consider placement of unanchored log and/or rootwads in streams. LWD should exceed one bank-full width in length. When available, skyline or helicopter yarding systems used to yard the THP logs can be employed to place LWD in the channel where ground-based equipment access is not available. LWD installation projects should be coordinated with CDFG, NMFS, and other applicable state and federal agencies. [This mitigation is intended to accelerate recovery of the aquatic system, and should only be considered after thorough study of potential effects as part of operational demonstrations, formal studies, or research projects. This mitigation is not necessary to prevent potentially significant effects associated with timber management operations.]



Monitoring of this mitigation measure shall be as follows:

Timing: As part of THP review

Scope: Forest-wide Implementation Responsibility: the Department the Department the Department

# 5. Mitigation of Impacts on Biological Resources

Mitigation 5. Although the DFMP may indirectly address sudden oak death (SOD), the recently developed information on the distribution, spread and control of SOD indicates that SOD should be directly addressed in the DFMP. Infected foliage and small diameter woody material of a number of host plants present a high risk for disease spread. Spread of the disease can occur through the unintentional transport of these materials. Language should be included in the Forest Management Plan to incorporate the most current "Best Management Practices" for controlling the distribution and spread of SOD. Such Management Practices are listed and described in Appendix 14. It is recommended that Appendix 14 be incorporated as an element of the adopted Forest Management Plan, and maintained to incorporate the most current "Best Management Practices."

Monitoring of this mitigation measure shall be as follows:

Timing: During adoption of FMP and as part of THP review

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department

#### 6. Mitigation of Impacts on Wildlife

Mitigation 6. To address the potential impacts to wildlife species, the DFMP should be revised to incorporate the following mitigation measures to supplement the snag retention standards presented in the DFMP: Retain all snags within all timber harvest areas with the exception of snags that pose a fire or safety hazard, or are within the alignment of roads proposed for construction. The largest snags, including residual old-growth snags, should have priority for protection until the snag retention goals of the DFMP are met. The DFMP establishes monitoring standards in-regards to the snag retention requirements. No changes to those standards are required.

Monitoring of this mitigation measure shall be as follows:

Timing: During adoption of FMP and as part of THP review

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department



#### 7. Mitigation of Impacts on Heritage Resources

Mitigation 7A: THP-specific studies performed in accordance with *Forest Practice Rules* shall include (a) oversight and review of *Confidential Archaeological Addendums* by qualified professional archaeologist for studies conducted by certified RPFs, (b) a current archaeological records check as defined in 14 CCR Section 895.1 that would include review of identified but unrecorded historic resources listed in Gary and Hines (1993), and (c) formal recordation to current standards of all identified heritage resources, among other standard procedures. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department the Department the Department

Mitigation 7B. While preparing timber sales, JDSF staff will (a) regularly consider potential impacts to significant heritage resources located along regularly used or main logging access roads, (b) assess the potential for long-term site attrition, (c) consider the appropriateness of CARIDAP: Sparse Lithic Scatters (Jackson et al. 1988), and (d) for other types of sites, carry out data recovery excavations, site capping, and/or road realignment and proper abandonment where feasible. To do this, the access roads need to be mapped and included in the archaeological survey for the timber sale, in addition to the actual logging area. Road survey coverage shall be plotted on the JDSF archaeological survey database maps. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department

Mitigation 7C: As funding and opportunities allow (e.g., competitive grants, interagency agreements with California State University anthropology programs), CDF will prioritize completion of a general (non-THP-specific) heritage resource inventory (including formal recordation and significance evaluation). Monitoring of this mitigation measure shall be as follows:

Timing: As funding and opportunities allow, during life of the JDSF

**Management Plan** 

Scope: Forest-wide Implementation Responsibility: the Department the Department the Department



Mitigation 7D. The JDSF Heritage Resource Officer shall initiate consultation with local Native American tribes to determine the presence or absence of Native American gathering areas or other locations of cultural or religious importance. These locations, if any can be confirmed, shall be plotted on the JDSF heritage resource database. This database will be reviewed prior to preparation of each timber sale, and specific management of those locations will be developed in consultation with affected local tribes. Monitoring of this mitigation measure shall be as follows:

Timing: During life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department the Department the Department

Mitigation 7E. In concert with the *Pre-Suppression Plan* to be developed for JDSF, employ standard procedures described in the *Forest Practice Rules* (i.e. to contact local tribes, conduct field survey, develop mitigation to protect significant sites) to avoid potential impacts to significant heritage resources where pre-fire defense improvements (fire breaks, helispot locations, water tanks, adequate road and trail access) and incident camps will be established. Any related construction or use shall be preceded by an archaeological survey and impact assessment, and documented on CDF survey report form, in accordance with Department procedures. Monitoring of this mitigation measure shall be as follows:

Timing: During planning and implementation of the Pre-

**Suppression Plan** 

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department

Mitigation 7F. To the extent practical during emergency fire-fighting activities, rely on persons trained to identify archaeological sites (professional or certified RFPs), to avoid or minimize heritage resource impacts from fire suppression and support activities (e.g., grading or hand-digging of fuel breaks, establishment of incident camps). Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department the Department the Department

Mitigation 7G. After a wildfire has been safely suppressed, rely on a professional CDF archaeologist to oversee and document site damage assessments and as needed, develop and supervise site stabilization, data recovery or rehabilitation efforts, with assistance, to the extent possible, from certified RFPs.



Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department the Department

Mitigation 7H. When planning for prescribed burns, employ CDF's "Procedures for Archaeological Review of CFIP and VMP Projects" to avoid potential impacts to significant heritage resources. Emphasis must be placed on identifying, formally recording and devising appropriate treatment measures for constructed historic features made of lumber and surface or shallow archaeological deposits in heavy fuel settings that may be significantly altered or destroyed by fire. The archaeological survey and impact assessment shall be documented on CDF survey report form, in accordance with Department procedures. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department

Mitigation 7I. Potential impacts to important Native American plant collecting areas from prescribed burns will be avoided by consulting with interested, recognized local Tribes (as listed by the Native American Heritage Commission [NAHC] for use for Timber Harvest Plans) about potential effects (positive or negative) of fire on plant collecting areas, and if identified, by modifying prescribed burn plans, to the extent practical, to meet both CDF's and the Native Americans' desired results. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department

Mitigation 7J. Prior to any road grading work, the current database of heritage resources shall be checked to determine if any known sites exist along the road segments to be treated, and a archaeological survey of the road segment will be conducted by either a professional archaeologist or an RPF with current archaeological training. Any identified heritage resource will be recorded and its potential significance evaluated. Specific mitigation measures to protect the site(s) will be developed in consultation with a CDF Archaeologist and documented in the project file. Monitoring of this mitigation measure shall be as follows:

Timing: During the period applicable to the 2001 Categorical

**Exemption for road maintenance at JDSF** 

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department



Mitigation 7K. In concert with the road inventory described in the *Road Management Plan* for JDSF (DFMP Appendix VI), make it a priority to complete within the five-year effort the heritage resources inventory for the existing road system (including rock borrow pits and related appurtenances) by employing standard procedures described in CDF's Archaeological Review Procedures. Consult with interested Tribes to determine if significant traditional cultural properties or other heritage resources such as plant collecting areas are present and may be affected. Planning for road improvements or abandonment needs to consider and implement measures to avoid or minimize potential impacts to significant heritage resources. The inventory shall be documented in the CDF Archaeological Report form, or other report format consistent with OHP (1989) guidelines. Monitoring of this mitigation measure shall be as follows:

Timing: Complete inventory within first five years of

implementation of JDSF Management Plan; implement protection measures in conjunction with development of

JDSF Road Management Plan

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department

Mitigation 7L. For new road construction or substantial improvements to existing roads and appurtenances (including development of new rock borrow pits), or when planning for abandonment of roads and/or related appurtenances, apply standard procedures described in CDF's Archaeological Review Procedures to avoid potential impacts to significant heritage resources. Consult with interested Tribes to determine if significant traditional cultural properties or other heritage resources such as plant collecting areas are present and may be affected. Where known site boundaries are not systematically defined or in question, establish reasonable buffer zones for heritage resources where ground disturbing maintenance activities will be avoided, and monitor for compliance. The results shall be documented in the CDF Archaeological Report form, or other report format consistent with OHP (1989) guidelines. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan; in

conjunction with development and implementation of

JDSF Road Management Plan

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department

Mitigation 7M. Before planned ground disturbing maintenance or improvements is carried out (e.g., installing toilets, showers, barbeque pits, constructing new trails, per DFMP Section 3, Recreation, Aesthetics, and Public Use), an archaeological survey shall be performed. JDSF staff shall conduct an archaeological survey of the area considered for development. A professional archaeologist or a person with current certification from CDF for archaeological surveys must conduct this survey. The work must be done in consultation with a CDF Archaeologist and



follow the procedures outlined in CDF's *Archaeological Review Procedures for CFIP and VMP Projects*. A check of the current database of heritage resources on JDSF shall be included in this work. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department

Mitigation 7N. Because excluding the public from the Forest would conflict with the management goals of allowing recreational use of the Forest, excluding the public in order to reduce vandalism and looting is not considered a feasible mitigation measure. Revise JDSF visitor brochures to include an advisory statement that the unauthorized collecting of artifacts and the looting or vandalism of sites is prohibited by State law, and provide direction on what the visitor should do in the event that prehistoric or historic artifacts are encountered on the Forest. This shall include a section in the main Forest brochure, and the creation of a new brochure specifically addressing the archaeology and history of JDSF that will include a more detailed discussion of how visitors should respond to discovery of historic or prehistoric sites or artifacts on the Forest. Develop similar language in all permits issued to forest visitors and recreationists (including special events such as the annual Enduro equestrian race, Skunk Train bicycle ride, and collecting permits for non-timber forest products) and as part of the artifact display at Forest headquarters. JDSF staff shall look for evidence of vandalism and looting at heritage resource sites during patrols of the Forest, and shall promptly notify a CDF Staff Archaeologist in the event any such damage is observed, initiate an investigation to determine who has vandalized or looted the resource, and assist in taking enforcement action as appropriate. A CDF Staff Archaeologist shall be consulted during the development of a treatment plan to rehabilitate damaged sites.

Monitoring of this mitigation measure shall be as follows:

Timing: Within one year of implementation of the JDSF

**Management Plan** 

Scope: Forest-wide
Implementation Responsibility: the Department
Monitoring Responsibility: the Department

Mitigation 7O. By using JDSF's Collecting Permit process, the JDSF staff shall work together with interested Tribes to identify important traditional plant collecting areas, and shall seek to minimize the application of herbicides to the plants of interest to the extent practical. Monitoring of this mitigation measure shall be as follows:

Timing: During life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department Monitoring Responsibility: the Department



Mitigation 7P. When planning for or reviewing proposed demonstration and research projects, employ standard procedures described in *CDF's Archaeological Review Procedures for CFIP and VMP Projects*, and include a check of the current JDSF heritage resource database, to avoid potential impacts to significant heritage resources. Document heritage resources study findings in the CDF Archaeological Report form, or other report format consistent with OHP (1989) guidelines.

Monitoring of this mitigation measure shall be as follows:

Timing: During life of the JDSF Management Plan

Scope: Forest-wide Implementation Responsibility: the Department the Department

#### 8. Mitigation of Noise Impacts

Mitigation 8. Active timber operations within the vicinity of occupied campgrounds and picnic areas will be limited to weekdays and non-holidays. Noise abatement mitigation will be included in any timber sale within 1,000 feet of an open campground or within 200 feet of a residence, park, or other identified sensitive receptor. Camp hosts will be kept informed of activities associated with timber operations affecting campgrounds under their jurisdiction. In addition, noise impacts on nest sites of listed species and neighbors will be considered in decisions to prescribe helicopter use in logging operations. The Mendocino General Plan standards for residential dwellings in rural suburban communities will be used as a guide in assessing noise impacts expected from specific timber harvest operations.

The following helicopter flight modifications will be utilized when necessary to further mitigate noise impacts within and adjacent to JDSF to a level less than significant:

- 1. Buffer helicopter pads by using ridges or other solid sound attenuating landscape features where available and practicable.
- 2. Design helicopter flight paths to provide buffering distance from hiking trails, campgrounds, and areas inhabited by species of concern where necessary.
- 3. Where practicable, design helicopter flight paths using terrain features that would minimize noise reception by sensitive receptors (i.e. fly behind ridges).
- 4. Limit times of day for helicopter use to minimize impacts within and adjacent to JDSF.

In addition to mitigation measures specified within the DFMP, utilize the Mendocino County General Plan and other existing standards as guidance in the development of mitigation will reduce noise impacts from timber operations within JDSF to a less than significant level (see Land Use section). Logging related noise levels likely to be generated under the DFMP are consistent with applicable state and federal noise standards.

Potential noise levels can generally be determined by considering the equipment used, time of use, terrain, and distance to sensitive receptors. Monitoring of this mitigation measure shall be as follows:



Timing: During the life of the JDSF Management Plan

Scope: Forest-wide
Implementation: the Department
Monitoring Responsibility: the Department

#### 9. Mitigation of Impacts on Recreation

Mitigation 9. For public safety, post and maintain signs around all areas closed to public access for timber operations that includes information defining the period of closure. In order to avoid conflicts between recreation uses and for public safety, post and maintain appropriate signs around all areas closed to hunting, trapping, and the use of firearms. Signs should be posted at all points where roads and trails enter such areas and, in the case of hunting restrictions, at legally required intervals along the perimeter of such areas. Monitoring of this mitigation measure shall be as follows:

Timing: During the life of the JDSF Management Plan

Scope: Forest-wide
Implementation: the Department
Monitoring Responsibility: the Department

#### 10. Additional Mitigation of Impacts on Botanical Resources

Mitigation 10A. The first sentence of the first paragraph of the "Species of Concern" section on page 17 of the DFMP will be amended to read as follows:

A total of 18 vertebrate and approximately 30 plant species of concern currently occur or may have a high probability of occurrence on Jackson Demonstration State Forest and are considered specifically in the management plan (Table 1).

Mitigation 10B. The first paragraph of the "Plant Species of Concern" section on page 62 of the DFMP will be amended to read as follows:

The following Plant and Lichen Species of Concern occur on JDSF:

- Arctostaphylos mendocinoensis, "pygmy manzanita"
- Astragalus agnicidus, "Humboldt milkvetch"
- Calamagrostis bolanderi, "Bolander's reed grass"
- Campanula californica, "swamp harebell"
- Carex californica, "California sedge"
- Cupressus goveniana ssp. pigmaea, "pygmy cypress"
- Lilium maritimum, "coast lily"
- Lycopodium clavatum, "running-pine"
- Mitella caulescens, "leafy-stemmed mitrewort"
- Pinus contorta ssp. bolanderi, "Bolander's pine"
- Usnea longissima, "long-beard lichen"



Mitigation 10C. Under the "Species Protection" section on page 62 of the DFMP, a new first bullet will be added to read as follows:

In general, the pre-project scoping process will include DFG input referencing Tables 14 and 15 of the final EIR, Appendix 8D-1 and 8D-3, available database information from the California Natural Diversity Database and CNPS Inventory, and other sources of sensitive plant habitat and occurrence data.

Mitigation 10D. Under the "Species Protection" section on page 62 of the DFMP, the following will be inserted after the first sentence of what is currently the second (last) bullet on that page:

Survey designs will be based on the concepts contained in the DFG Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities (DFG 2000). Surveys conducted as part of THP development will follow the practices commonly accepted by CDF and CDFG for THP review. Surveys for other types of projects will recognize the specific features of those projects. [For example, road surface maintenance and roadside brushing are ongoing activities that create repeated periodic disturbances, precommercial thinning typically occurs a few years following the more substantial disturbance of a commercial harvest, and shaded fuel break construction targets ground cover vegetation]. Project specific botanical field surveys will be conducted within potential habitat in a manner that is likely to locate sensitive plant species identified during scoping as being susceptible to significant project impacts.

Mitigation 10E. Under the "Species Protection" section on page 62 of the DFMP, the following sentence will replace the last sentence of what is currently the second (last) bullet on that page:

Observations of rare, threatened or endangered plants or plant communities will be recorded on Field Survey Forms and copies provided to CDFG 's California Natural Diversity Database (CNDDB).

Mitigation 10F. The "Surveys" section on page 69 of the DFMP that falls under the "Guidelines for Species Surveys and Avoidance of Significant Impacts" section will be changed to the following:

When suitable habitat is present within or immediately adjacent to the project area, project-planning documentation will include results of surveys and a discussion of the efforts made to determine presence or absence of the species in question. Avoidance measures and other mitigation determined to be necessary to avoid significant effects will be specified.

Mitigation 10G. Under the "Species Protection" section starting on page 62 of the DFMP, the following will become the last bullet of that section ending on page 63:

JDSF will provide for, on an as-needed basis, a sensitive plant identification-training program to enhance the knowledge of field personnel that may encounter sensitive plant resources. Personnel who will be responsible for botanical surveys should meet the

recommended qualifications for botanical consultants included in the DFG survey guidelines (DFG 2000). Personnel who will be responsible for botanical surveys and those conducting the survey(s) will be capable of identifying the listed species for which the survey is conducted.

Mitigation 10H. The paragraph under the "Habitat Management Practices" section on the top of page 63 of the DFMP will be changed to read as follows:

Limited removal of species in the pygmy cypress forest may occur as a result of habitat development projects for the Lotis Blue Butterfly. Prior to habitat development projects, rare plant surveys will be conducted according to accepted survey guidelines to address sensitive plant resources. A qualified botanist will assess the appropriateness of removal of any sensitive plant species in relationship to fostering habitat for the growth of the butterfly's host species, *Lotus formosissimus*. Effectiveness monitoring will be conducted for any habitat management practice involving removal of plant species in the pygmy forest to assess the response of the forest to habitat alteration.

Mitigation 10I. The first bullet under the "Plant and Animal Species of Concern Possibly Present on the JDSF" section on page 68 of the DFMP will be changed to read as follows:

Boschniakia hookeri "small ground cone," Carex arcta "northern clustered sedge," Carex livida "livid sedge," Carex saliniformis "deceiving sedge," Carex viridula var. viridula "green sedge," Erythronium revolutum "coast fawn lily," Fritillaria roderickii "Roderick's fritillary," Glyceria grandis "American manna grass," Juncus supiniformis "hair-leaved rush," Lasthenia macrantha ssp. bakeri "Baker's goldfields," Pleuropogon hooverianus "North Coast semaphore grass," Rhynchospora alba "white beaked-rush," Sanguisorba officinalis "great burnet," Senecio bolanderi var. bolanderi "seacoast ragwort, Sidalcea calycosa ssp. rhizomata "Point Reyes checkerbloom," Sidalcea malachroides "maple-leaved checkerbloom," Sidalcea malviflora ssp. purpurea "purple-stemmed checkerbloom," Triquetrella californica (N/A), and Viola palustris "marsh violet."

Mitigation 10J. The first sentence of the first paragraph of the "Guidelines for Species Surveys and Avoidance of Significant Impacts" section on page 69 of the DFMP will be revised to read as follows:

JDSF will evaluate the potential for individual land management actions to have a significant impact on rare, threatened, or endangered species (as defined by Section 15380(d) of the CEQA Guidelines and/or Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code).

Mitigation 10K. The last sentence of the first paragraph of the "Guidelines for Species Surveys and Avoidance of Significant Impacts" section on page 69 of the DFMP will be revised to read as follows:

For unlisted species identified as sensitive, but that do not meet the definition of rare, threatened, or endangered under the above-mentioned sections of the CEQA Guidelines



and/or California Department of Fish and Game Code, evaluation and mitigation practices are likely to vary according to identified need, the current state of species knowledge, and through consideration of input provided by CDFG.

Mitigation 10L. The "Surveys" paragraph under the "Guidelines for Species Surveys and Avoidance of Significant Impacts" section on page 69 of the DFMP, as revised by Mitigation 10F, will be revised to conclude with the following:

When suitable habitat is present within or immediately adjacent to the project area, project-planning documentation will include results of surveys and a discussion of the efforts made to determine presence or absence of the species in question. Avoidance measures and other mitigation determined to be necessary to avoid significant effects will be specified.

Survey designs will be based on the concepts contained in the DFG Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities (DFG 2000). Surveys conducted as part of THP development will follow the practices commonly accepted by CDF and CDFG for THP review. Surveys for other types of projects will recognize the specific features of those projects. [For example, road surface maintenance and roadside brushing are ongoing activities that create repeated periodic disturbances, precommercial thinning typically occurs a few years following the more substantial disturbance of a commercial harvest, and shaded fuel break construction targets ground cover vegetation].

Mitigation 10M. The second sentence of the first paragraph following the Goal statement in the "Plant Resources" section on page 106 of the DFMP will be revised to read as follows:

A qualified botanist or trained forest personnel will conduct surveys based on the concepts contained in the DFG Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities (DFG 2000) within project areas and areas of influence to assess plant occurrence as necessary (inventory/baseline monitoring).

Monitoring of Mitigation Measures 10A through 10M shall be as follows:

Timing: During adoption of FMP and as part of the THP review

Scope: Forest-wide
Implementation: the Department
Monitoring Responsibility: the Department

#### 11. Russian Gulch Mitigation

In response to comments requesting additional protection for the timber stands within Russian Gulch, CDF has designated a research/demonstration area, shown as Figure R and appended to the Final EIR, within the Russian Gulch watershed and its vicinity where management practices will be used to accelerate the recruitment of old growth quality forest conditions. The area, consisting of approximately 200 acres, will use silvicultural stand management with the specific



intention to accelerate the development of large trees with appropriate canopy closure and other habitat features to increase future marbled murrelet habitat. CDF will consult with the US Fish and Wildlife Service and the California Department of Fish and Game on the development of appropriate silvicultural prescriptions to be applied in this area.

The designated area for this research/demonstration effort shares a border with the Woodlands Special Treatment Area near Road 408, creating a potential future flyway consisting of contiguous late-seral forest habitat. Combined with new and existing adjacent State Park lands, this will create an area of approximately 13,000 State-owned acres, which will be used to research and demonstrate methods to accelerate development of old growth habitats. Agreements between CDF and State Parks will be written to coordinate research and recreation opportunities.

Monitoring of this mitigation measure shall be as follows:

Timing: During adoption of FMP and during the life of the JDSF Management Plan

Scope: Russian Gulch watershed

Implementation Responsibility: the Department Monitoring Responsibility: the Department

